(Knowledge for Development)

KIBABII UNIVERSITY
(KIBU)

UNIVERSITY EXAMINATIONS
2021/2022 ACADEMIC YEAR

SPECIAL/SUPPLIMENTARY EXAMINATIONS
YEAR TWO SEMESTER TWO EXAMINATIONS

FOR DIPLOMA
(INFORMATION TECHNOLOGY)

COURSE CODE   :   DIT 078

COURSE TITLE   :   SYSTEMS ADMINISTRATION

DATE: 29/7/2022   TIME: 8.00 A.M. – 10.00 A.M

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTIONS ONE AND ANY OTHER TWO.

QUESTION ONE (COMPULSARY) [24 MARKS]

a) Define the following terms as used in system administration.   [8 Marks]
   i. System administrator
   ii. System
   iii. Proxy
   iv. Operating system
   v. Hardware
   vi. Patch
   vii. Server manager
   viii. Virtual machine

b) Identify at least five traits of a system administrator.   [5 Marks]
c) Explain the term PowerShell and states four function of PowerShell?   [6 Marks]
d) State five of the features of Window Server.   [5 Marks]

QUESTION TWO [18 MARKS]

a) State and explain the two main Email Severs.   [4 Marks]
b) What are the primary Subsystem that make up a server?   [6 Marks]
c) Explain the function of Server Manager.   [4 Marks]
d) What are minimum requirements for installing a server?   [4 Marks]

QUESTION THREE [18 MARKS]

a) What will happen if the system is compromised?   [5 Marks]
b) User management is about interfacing humans to computers. This brings to light a number of issues. Identify these issues.   [5 Marks]
c) Explain the four basic elements in security   [8 Marks]

QUESTION FOUR [18 MARKS]

a) What Is Domain?   [1 Mark]
b) Differentiate between Domain Controller and Active Directory?   [4 Marks]
c) Why do we use DHCP?   [2 Marks]
d) Configuration management is the administration of state in hosts or network hardware. Host state is configured by a variety of methods. Highlight the methods.   [4 Marks]
e) Explain the following terms as used in Server administration, DHCP and DNS.   [4 Marks]
f) A virtual Machine is a software that creates a virtualized environment between the computer platform and the end user for the user to operate the software. What are the benefit of virtual machine?   [3 Marks]

QUESTION FIVE [18 MARKS]

a) Identify and describe different weather and environments and explain how they are important for operation.   [5 Marks]
b) Proper handling of hardware is at the heart of system administration. Explain the do's and don'ts vis-à-vis handling hardware.   [7 Marks]
c) What Does a Sysadmin Do?   [3 Marks]
d) State Personal Characteristics of a System Administrator?   [3 Marks]